food, seed, and chicken feed were met, 58 per cent of the crop remained to be sold off for cash (Janlekha 1955:53). Almost every inhabitant was engaged in commercial rice farming. A few teachers, craftsmen, and traders, alone did not farm. Plantings of early and late varieties in different plots spread the toil. Cooperative work or some local hired help assured adequate labor forces at the needed moment. Nevertheless, two heavy work seasons dominated the rice cycle. The first of these, June through August, involved soil preparation and transplanting of the seedlings in long straight rows. In the second season, November into February, the rice was harvested, brought home for threshing and winnowing, then sold or stored. The straw was stacked as buffalo feed. People were anxious during the preparatory and planting season, for rains were fickle and the planning and timing had to be exact. Work was hard and almost grim. Harvest, though perhaps more of a physical strain because people cut the stalks by day, then threshed and winnowed far into the night, was gay and so less taxing emotionally, for the crop had safely passed through the threats of flood, drought, and pest, and "cash was in sight." Haste was necessary because each plot of rice had to be harvested within three or four days of its maturity, and because at that season the canals were drying up rapidly, raising the possibility not only that human backs and not boats would move the crop, but that the buyers themselves could not get their boats in to take the main portion to the urban markets. Then a farmer might have to wait until the canals filled again in June to sell his rice and get his money. Since during the busy seasons everyone from age 16 on up was taken up with farming, the cooking, child care, and other chores were carried on by the aged and the very young. These work days taxed to the limit the strength of all men, women, and even young people. Ten to 18 hours might be spent stooping to transplant or weed, or, at harvest, to cut the rice stalk close to the ground. There was a great deal of heavy lifting of seedling bundles or sheaves. The few professional masseurs in the area said they were kept on the run because of back complaints especially during the periods of heavy labor.

In the periods between these two seasons, tools were repaired, houses rebuilt, and ceremonies organized. Extra cash was earned in various ways. People kept very busy, though they did allow themselves more sleep.

The importance of women's role in agriculture is indicated by their virtual equation with men. In every step of rice-production women worked alongside men, plowing with the buffalo, planting, weeding, harvesting, repairing the dikes, hauling, etc. Only uprooting the seedlings was exclusively men's work (even this was done by women elsewhere in Thailand (Kingshill 1960:7)).

Besides the work in rice-fields, women dug and cleaned

562 delivery, "her blood was purified to a white color to become
827 the milk of the breast."[48] Nursing a child was the essence
853 of a woman's function, the supremely feminine act. A priest said, "A mother mercifully receives the khwan into her womb, and for maintaining life gives more of her own body, strength, and care (i.e. than does the father). Mothers are born to love children. Theirs is a steady intent to provide children with successful existences. To a mother one is most grateful" (S.S.).

562 In a wider context, not only all their household members
462 but people anywhere were the objects of women's nurture:
252 women were in charge of the cooking even if occasionally
264 helped by men. At the meals they prepared they were often the last to eat, so often "holding back and eating whatever was left over," that in a poor houshold, short rationing daily was probable (Hauck, et al.:35,49). One old lady expressed deep satisfaction that she "did not feel hungry
182 any more." She construed this as proof that she had ample
431 merit, but it also meant that she was a great donor who gave
796 continuously and took little. Women usually offered the early morning food to priests in behalf of the family, and they took charge of cooking the immense amount of food served at large ceremonies and temple festivities. When
593 age pushed women past their mature capacities, they returned
888 to the status of recipients. A son said of his senile mother, "She has gone back to being a child" (klap pai pen dek). The son's wife cooked delicacies for her.

562 A desire to give tender care and nourishment was deemed
857 inborn in all women. Although sex was not strongly differentiated in babyhood,[49] by age 3 a hard-to-handle
291 skirt was put on a tiny girl, who reacted with vast pride.
593 By 5, girls were helping with cooking and baby tending. Often has an older sister of 9 or 12 been observed patiently feeding her charge the ice cream she longed to eat herself.

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822 48. This very phrase was congruent with the colors associated with the khwan. Red or white flags, or pieces of cloth, or puddings (khanom) were required wherever khwan were involved, such as in rice, san phra phūm, and tham khwan ceremonies. Red was an auspicious color, white symbolized innocence and purity.

856 49. Anuman Rajadhon reports, though, that at the moment of birth, the child's sex was immediately "adjusted" (Anuman Rajadhon:127).

792 village offers of regular service, the holiday offerings, home
262 invitations and sporadic gifts so that all priests had places
441 to go, no one had much more than any other, and that the whole temple did not undergo periods of undue glut[1] or hardship.

792 About mid-July, Buddhist Lent changed the food habits
796 somewhat. This three-month period corresponded with the height
262 of the rainy season. Priests did not leave the temple to gather offerings on rainy mornings, but younger priests, assisted by the temple boys, cooked meals from supplies on hand. On the first day of Lent, people brought less perishable foods: green bananas, coconuts, sugar cane, pomelo, sweet potatoes, taro, onions, garlic, salt, sugar, dry salted beef paste, dried fish, canned goods, and milled rice. During Lent fresh or cooked foods were brought in, and some ladies volunteered to cook for varying periods of time. On a holiday in September, families made up such quantities of a sweet of "puffed" glutinous rice, sesame seed, and peanuts pounded and held together with sirup and sometimes covered with grated coconut that priests were tired of it and many children got diarrhea from overeating of it.

In mid-October, the Lenten restrictions ended with another holiday offering, and thereafter the priests went regularly on their appointed rounds.

796 On Buddhist holidays, the people did not usually eat any
261 of the food brought to the temple, but on (3)thaauad (2)ka-(5)thin[2], an all-day festival held in October or November, after feeding the priests, the people also ate bounteously.

792 Residing at Wat Bang Chan in 1954 were 22 boys, aged 10
857 to 16, sent to serve the priests, get their living and attend
262 school. Most of them were from poor or disorganized homes. They shared the food offerings from which they received three meals a day. Among the children's food records, the food listed by these boys as eaten the day before was comparatively diverse.

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792 1. Amounts of food given usually exceeded the actual
262 needs of the priests and temple boys. One instance was noted
737 in which food was sent by the priests to a needy old person
235 nearby. Leftover rice was dried and sold for chicken feed.

114 2. The transcription used throughout this report is
104 that described by Sharp et al., 1953, pp. 12-15. Numbers in parentheses represent the different tones of the syllables.

Seasonal Activities

128 A chart has been prepared to show the climatic conditions in Bang Chan and what people were doing at different seasons (Chart 1). For convenience, the periods covered by the four rounds of the dietary survey (p. 58) are included.

221 The year starts with May, the beginning of the rice-
132 year. At this time the rains began to soften the parched ground, and the heat slackened. School re-opened. Farmers
241 turned to plowing, harrowing, raising the seedlings. Both
512 sexes worked about equally in field labor, boys from 14 and
871 girls from about 15 years of age performing tasks according
462 to skill and strength. Everyone was in the field at dawn.
983 The buffalo, but not the farmer, rested through the noonday heat (about 10 a.m. until 2 p.m.) and also on the weekly holy
244 day. Meals were usually eaten about 10 a.m. and after returning from the field at dark. Although two meals a day were usual at other times, at this season, some had a third
1264 meal about 2 p.m. If the buffalo were brought home to rest, this meal could be eaten at home, but hired laborers or those working far from home often took with them rice and other foods in a (2)pin-(1)too, or tiered lunch kit.

221 With the rains, the canals had filled, so that by June
132 buyers with big rice boats could return. The few farmers who
501 could afford to hold onto a portion of their last year's crop
443 sold it for a better price at this time. Vegetables and
241 fruits which had died in the long drought were replaced, and trees were planted.

24 In July the heavy transplanting season began. Because
221 of cooperative work habits or hiring out, people worked
132 solidly day after day for two months on their own or on another's fields. It was dawn-to-dark, back-breaking work.

This was an anxious time. The seedlings had to go in at exactly the right time. Water level was only partly con-
312 trollable. Lack of rain might be remedied by pumping water
871 from the canals but flooding would drown the plants. School vacation was scheduled at this time so both teachers and
857 children could help. Older children might work in the fields,
887 while younger ones, from 8 to 13, and the aged took over the care of babies and toddlers, fished, cooked, gathered food
438 for the family and grass for the buffalo. People knew the crop was subject to drought and flood, pests of rats and worms, destruction by birds or wandering buffalo or duck, and in the end to the mysterious fluctuations of the price of rice on the world market. Moreover, some persons worried about debts, acquired from giving a ceremony or making a capital investment and sometimes from heavy gambling during the rest season.

252 a woman's" (Sharp et al., 1953, p. 88). For instance, the
462 husband cooked when his wife was away from home, e.g. selling in the market or in farm labor, and of course when she was
252 sick or resting after childbirth. The ability of boys as well
857 as girls to cook rice and some of the accompaniments was taken for granted. A girl or boy could cook rice "as soon as he could lift the rice pot," e.g. at 6 or so; by age 12 he could cook a creditable meal. In mid-December, 1952, on the last day of school before vacation, one of us saw committees of school children (aged 7-14 years) preparing food for a special meal, on the school grounds. The variety of dishes prepared and the ease with which the children went about their tasks gave evidence of the home experience these children had had
252 (Hauck, 1953). Responsibility for food preparation increased
[383] with age up to about 15 years, after which all available able-bodied family members did field work during the busy seasons (cf. p. 11). Several hours per day were spent in cooking and by middle age, parents were eager to turn this job over to a
[597] daughter or daughter-in-law. If they had no daughter, this was an explicit reason for adopting a baby girl.

252 Certain men of eminence, e.g. headmen and elders, would
554 not be asked to cook at all, but as they aged, they might re-
887 turn to the task. One old headman, all of whose children had married and left home, said that he was doing the cooking for
252 2 months because his wife had back trouble. Some dishes were
562 cooked by men only, even when their wives stood by: turtle, frog and cobra curries, for instance. These were also food for men only, suitable to serve at a drinking party.

252 A premium was put on good cooking, and certain women
261 who were noted for their cooking were in great demand for large
[869] scale food preparation during the ceremonial season. One farmer planned to send his daughter to learn from such a skilled cook, having in mind the food preparation which would be needed when his sons were old enough to be ordained. Adverse comments might be made if the food did not come up to expectation; thus, a small boy complained that his curry was "too salty," and an old woman said loudly that the curry made by her 16-year old grand-daughter was "not good," although this girl was the only one at home to cook.

Meal Patterns[1] and Preparation of Typical Thai Dishes

252 Food was commonly prepared twice a day, in the morning
264 and late afternoon. The meal pattern was the same for breakfast

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1. Suvarnakich (1950) described the Thai diet in a
262 general way and Sharp et al., (1953, pp. 263-274) summarized the small amount of information on diet in Bang Chan obtained during the preliminary study in 1948-49.

per day were calculated for Groups A and B by Round and for all survey days (24 days for 6 families in Group A, 20 for 5 families in Group B). The total amounts eaten per capita per day, of various food groups, and the relative nutrient contributions of these groups were also calculated.

Results and Discussion

Socio-Economic Situation of the Two Groups of Families Studied

General Socio-Economic Conditions. - In the course of the study the observers were able to obtain information, both by inquiry and direct observation, on the economic condition of the families. Questions about land holdings, the amount of land farmed, number of working buffaloes owned, number of priests to whom food was given and sources of income, were asked during the second Round of the survey, after the participants were acquainted with both the field workers and the procedures. As raw foods were weighed, the observer asked if they were home grown or prepared, and recorded the cost of foods purchased.

Although our sample was not stratified with respect to economic condition, the families in Group B, i.e. those chosen for apparently better nutriture, proved to be more prosperous than those in Group A (Table 8). With the exception of Household 222 in Group A, rice production was the main source of income. Families in Group B had a greater capital investment in land and buffalo, and worked more land, having more productive hands per family available. Farm work was finished sooner, hence members could begin intensive fishing earlier than in Group A. All children aged 13-15, in both groups, did light farm work and/or selling in market, cooking, baby tending and care of buffalo. In all households, husband or wife or both came from old families in the community, hence had extensive kinship relations.

From the viewpoint of parents, the "peak of life" was the time when children were no longer dependent, but productive, unmarried workers whose earnings stayed within the family. Household 16 was such a family, forward looking, progressive and optimistic. The successful and respected couple in Household 25 would enter this "peak of life" situation in a few years. Household 20 included a widower and his almost grown daughter living with his younger brother and the latter's family, and their senile mother, in harmonious cooperation. Ample land, housing, buffalo and farm labor combined with other skills, made for good living. In Household 21, two strong, unmarried sons still lived with their elderly parents. The only poor family, of low status, in Group B, was Household 23. By great industry, especially in

[Text continues on page 63 --- Analyst]

fishing and selling vegetables, they managed to obtain a fair diet. The father's skill as a masseur was valued especially at periods of heavy farm work, after childbirth, and by the cooks at a ceremonial feast. This brought in from 2 to 12 baht per week.

In Group A, Families 67 and 103 were at the most difficult period of life, with young, dependent children, and housing, land and equipment to be acquired. By great industry, including egg production from a flock of 60 chickens, and by severe "belt-tightening," Household 103 was lifting itself into a propertied position. The parents in Household 67 were shy. One or the other of the two older children often stayed home from school to look after the baby, so that both parents could work. Husband and wife in Household 12 were both very shy, the only ones in the survey group who were at all reluctant to participate. They seemed ashamed of limited food. The wife was frequently ill. In Household 222, the 14-year old daughter often gathered and sold vegetables at Minburi before school in the morning. She might have full charge of the younger children for days at a time. A daughter who worked as a servant in Bangkok contributed 50 baht per month to this household. In Household 215, the activities of the wife as medium were predominant. Pay included food, often cooked, and the free use of 3½ rai of land, as well as cash. Maintenance of a son in school in Bangkok cost about 1000 baht per year plus 60 tang of rice. In Household 2, the elderly wife's services as "boss-buyer and cook" at ceremonials, and as marriage go-between did not bring in cash, but gifts, clothing and much participation in feasts.

All families in the survey group were Thai Buddhists, and 6 of them offered food to priests more or less regularly. On 17 of the 24 survey days when the observer visited these households, food was offered. Two of the 5 families that did not customarily give food to priests, did so on one and two survey days, respectively. In one case food was offered to a son who had been recently ordained. Rice was always included in the food offered, and in 3 of the 20 instances observed rice only was given. The weight of cooked rice given by one family in one day ranged from 185 to 1210 grams, with an average of about 600 grams. In 16 instances, some cooked food such as fish or vegetable curry was given with the rice; in one instance fresh pineapple was given.

Cash Expenditures for Food. - Mean total, and per capita daily cash expenditures for food for survey days, are shown, by household in Table 8. (See Table 2, p. 23 for division of food expenditures for Groups A,B) Although cash expenditures for food varied considerably, the amounts in all cases were small, and approximated figures obtained by Janlekha (1955) for 106 households. Larger consumption of animal products, which were the most expensive items purchased,

7: Janlekha X-4,5 (1948-1953)1956 AO7 Central Thai AO7
Bangchan

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Family workers are members of farm operating families other than the farm operators themselves who regularly participate in the farm work of the families. These do not include children of school age who occasionally help in the farm work especially during the busiest period.

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Hired laborers are farm laborers who are hired for all or part of the work season for more or less fixed wages in kind or in cash. These hired laborers have in addition to their yearly wage a privilege to board and lodge freely at their employers' home, and thus become part of their employers' household. The contract, usually verbal, is on a one year basis.

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Piece-workers are farm laborers who receive wages on a piece-work basis for such short-term tasks as uprooting the seedlings, transplanting, and harvesting. Payment for piece-work is made at the end of the day at going rates. It has been observed that most of the extra work in Bangchan is done by piece-workers, and that very few farms engage hired laborers. Piece-workers may be called independent workers, for they have no obligation other than finishing the day's task agreed upon. They may work whenever they please and may stop working altogether if they have enough money. The disadvantage of piece-workers is that they do not have, as hired laborers do, the guarantee of a job. This is quite crucial especially if under-employment of farm labor exists.

Age	Method	Kinds of Farm Work
13-14	Moderate pressure.	Hauling, weeding, buffalo tending, transplanting, chicken feeding, fishing, household work.
15-16	High pressure.	All kinds of farm work. Harrowing, harvesting, and uprooting (boys only) are started at this age.

By the time the young are 16 years old, they are already reliable farm hands, although they are still not considered competent enough to participate in the cooperative work to which only the best family workers are expected to be sent. By the time they reach 18 years of age, all males and females should be well trained in all kinds of farm work.

According to the Primary Education Law, parents are responsible for sending their children to school at the age of eight. These children are to remain in school until they are over fourteen years old, or until they have passed Pratom IV.[2] Since school hours start at nine and last until three in the afternoon, children of school age are still able to participate in the farm work before or after school hours. Moreover, most rural primary schools including the Bangchan Primary School have adjusted their vacation recesses to the periods when rice farm labor is needed most -- from August 16 to September 15 which coincides with transplanting period, and from December 16 to January 15 which coincides with harvesting period. It is during these vacations that the upperclass children are expected to contribute their

2. Primary education is divided into four academic years -- Pratom I, II, III, and IV.

7: Janlekha X-4,5 (1948-1953)p956 AO7 Central Thai AO7
Bangchan

243 857 872 labor to the family farm work. It is also the time for children of families of other occupation to earn their small lampai from piece-working.

872 871 We have devoted a few pages to this topic of training the young for farm work because we think it is relevant to the study of the village economy. While the standard of teaching is generally poor in most primary schools in Thailand and consequently farm children receive rather poor academic education, it has been observed that their training in the farm work given by the family is exceedingly thorough. With the exception of a few bright children who are able to finish Pratom IV in four years and thus are able to leave the primary school at the age of 12, most farm children are kept in the school until the age of 14 because they usually fail in the examination at the end of each academic year and have to repeat once, twice, and even thrice. A good many are obliged to leave school at the 369 87 compulsory age of 14 without passing Pratom IV. Urban children, on the other hand, usually pass Pratom IV at the age of 10 and are able to proceed on their secondary education at the standard age of 11 when they start their Matyom I. This is because they went to school at an early age and had better teachers at the Pratom level. Thus, farm children usually lag behind urban children in academic achievement. The situation is aggravated by the city secondary schools' practice of using students' achievement by age as the basis for admission decision. As a result, farm children do not

*243 times, usually three or four. When the seedbed had been plowed and cross-plowed, plowing of the other fields began, but not immediately after the plowing of the seedbed, for the buffaloes were then used in harrowing of the seedbed.

2. Harrowing. Started on June 13 after plowing of the seedbed was completed and ended on August 24, the day following the completion of plowing of the fields for transplanting. As with the case of plowing, harrowing was first concentrated on the seedbed.

3. Removal of weeds after harrowing. This is a necessary step following harrowing. During the harrowing process, weeds which have been turned over by plowing are collected at the spikes of the harrow. Occasionally, the farmer will lift up his harrow in order to free it from the accumulated weeds which are thus left in small piles. Not all the weeds, however, are caught by the spikes of the harrow. The result is that after harrowing there may be seen on the parcel small piles of weeds emerging above the water, while the uncollected weeds which scatter all over the parcel are hidden under water.

• [857] All these weeds must be removed from the parcel. Removal of these weeds may be done by children working side by side with adults. The weeds are first collected by hand and put in larger piles on the parcel. These larger piles are later transferred to the dike so that the parcel will be cleared of weeds. This process is usually done during the noon recess (actually from 10 a.m. to 2 p.m.) when buffaloes rest. Children may carry on the work while adults resume their plowing or harrowing

*243 511 and that they are consumed daily. Expense on cookies is high because of school children's daily allowances which *243 were assumed to be spent entirely on this item. Even though • 857 cash is extremely scarce in the village, especially during 511 the period from July until just before harvesting time in January when roughly seven out of ten farm operating families do not have any cash at all, the children still have the privilege of receiving daily cash allowance. This is possible because of the chicken enterprise. The children simply take eggs along and convert them into cash at cooky stalls in the school yard. In this manner, it is seen that the school children have an important part in the daily flow of Bangchan eggs into Bangkok markets.

*243 276 511 The kind of tobacco commonly used in Bangchan is the relatively inexpensive native tobacco which smokers make into cigarettes themselves with the use of a special kind of thatchleaf binder. Bangchan women do not smoke, but they use tobacco heavily while they chew betel. Most men, young and old, are in the habit of smoking, while chewing betel is now limited to elderly people of both sexes. Tobacco is thus rated among major items of expenses because it is used in smoking as well as betel chewing.

*243 291 511 Obviously, clothing is one of the major items of expenses. In fact, it is the highest item after food, averaging 556 baht per family annually. Since rice farmers work partially under water most of the time, the rate of wear and tear of clothing is rather high. Each family worker